

Inventor  
search

L1 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2000:772629 CAPLUS

DOCUMENT NUMBER: 133:340315

TITLE: Therapeutic action and properties of a polymorphic form of 5-[4-[2-(N-methyl-N-(2-pyridyl)amino)ethoxy]benzyl]thiazolidine-2,4-dione, maleic acid salt

INVENTOR(S): Blackler, Paul David James; Browne, Christine Marie; Coakley, Timothy G.; Giles, Robert Gordon; Morrissey, Gillian

PATENT ASSIGNEE(S): SmithKline Beecham PLC, UK; SmithKline Beecham (Cork) Limited

SOURCE: PCT Int. Appl., 21 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

INT. PATENT CLASSIF.:

MAIN: C07D417-12

SECONDARY: A61K031-44; A61P003-10

CLASSIFICATION: 63-8 (Pharmaceuticals)

Section cross-reference(s): 1

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000064896	A1	20001102	WO 2000-GB1520	20000419
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1173435	A1	20020123	EP 2000-920892	20000419
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
BR 2000009932	A	20020409	BR 2000-9932	20000419
JP 2002543077	T2	20021217	JP 2000-614248	20000419
EP 1304330	A2	20030423	EP 2002-80321	20000419
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				
NO 2001005147	A	20011217	NO 2001-5147	20011022
HR 20010772	A1	20021031	HR 2001-772	20011022
BG 106121	A	20020531	BG 2001-106121	20011120
PRIORITY APPLN. INFO.:			GB 1999-9473	A 19990423
			GB 1999-12196	A 19990525
			EP 2000-920892	A3 20000419
			WO 2000-GB1520	W 20000419

## ABSTRACT:

A polymorphic form of 5-[4-[2-(N-methyl-N-(2-pyridyl)amino)ethoxy]benzyl]thiazolidine-2,4-dione, maleic acid salt (the "Polymorph") characterized in that it provides: (i) an IR spectrum contg. peaks at 1763, 912, 856 and 709 cm<sup>-1</sup>; and/or (ii) a Raman spectrum contg. peaks at 1762, 1284, 912 and 888 cm<sup>-1</sup>; and/or (iii) a solid-state <sup>13</sup>C NMR spectrum contg. peaks at 111.0, 113.6, 119.8, 129.1, 130.9, 131.8, 134.7, 138.7, 146.5, 152.7, 157.5, 169.5, 171.0, 178.7 ppm; and/or (iv) an x-ray powder diffraction (XRPD) pattern which gives

calcd. lattice spacings at 5.87, 5.30, 4.69, 4.09, 3.88, 3.61, 3.53 and 3.46 Angstroms; a process for prepg. such a compd., a pharmaceutical compn. contg. such a compd. and the use of such a compd. in medicine.

SUPPL. TERM: antidiabetic polymorphic thiazolidinedione maleate  
INDEX TERM: Antidiabetic agents  
IR spectroscopy  
NMR spectroscopy  
Polymorphism (crystal)  
Raman spectroscopy  
X-ray diffractometry  
(antidiabetic action and properties of polymorphic form  
of [[(N-methyl-N-(pyridyl)amino)ethoxy]benzyl]thiazolidin  
edione maleate)

INDEX TERM: 155141-29-0  
ROLE: BAC (Biological activity or effector, except adverse);  
BSU (Biological study, unclassified); PRP (Properties); THU  
(Therapeutic use); BIOL (Biological study); USES (Uses)  
(antidiabetic action and properties of polymorphic form  
of [[(N-methyl-N-(pyridyl)amino)ethoxy]benzyl]thiazolidin  
edione maleate)

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS  
RECORD.

REFERENCE(S): (1) Haleblan, J; JOURNAL OF PHARMACEUTICAL SCIENCES 1969,  
V58(8), P911 CAPLUS  
(2) Smithkline Beecham Plc; WO 9405659 A 1994 CAPLUS  
(3) Smithkline Beecham Plc; WO 9855122 A 1998 CAPLUS  
(4) Smithkline Beecham Plc; WO 9931093 A 1999 CAPLUS

L1 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2000:772627 CAPLUS  
 DOCUMENT NUMBER: 133:340314  
 TITLE: Therapeutic action and properties of a polymorphic form of 5-[4-[2-(N-methyl-N-(2-pyridyl)amino)ethoxy]benzyl]thiazolidine-2,4-dione, maleic acid salt  
 INVENTOR(S): Blackler, Paul David James; **Giles, Robert Gordon**; Moore, Stephen; Sasse, Michael John  
 PATENT ASSIGNEE(S): SmithKline Beecham PLC, UK  
 SOURCE: PCT Int. Appl., 19 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 INT. PATENT CLASSIF.:  
 MAIN: C07D417-00  
 CLASSIFICATION: 63-8 (Pharmaceuticals)  
 Section cross-reference(s): 1  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000064893	A2	20001102	WO 2000-GB1522	20000419
WO 2000064893	A3	20010125		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1175418	A2	20020130	EP 2000-922793	20000419
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
BR 2000009935	A	20020416	BR 2000-9935	20000419
JP 2002543076	T2	20021217	JP 2000-614245	20000419
EP 1277753	A1	20030122	EP 2002-80319	20000419
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				
NO 2001005148	A	20011217	NO 2001-5148	20011022
HR 20010774	A1	20021031	HR 2001-774	20011022
BG 106122	A	20020531	BG 2001-106122	20011120
PRIORITY APPLN. INFO.:				
			GB <u>1999-9471</u>	A 19990423
			GB <u>1999-12195</u>	A 19990525
			EP 2000-922793	A3 20000419
			WO 2000-GB1522	W 20000419

## ABSTRACT:

A polymorphic form of 5-[4-[2-(N-methyl-N-(2-pyridyl)amino)ethoxy]benzyl]thiazolidine-2,4-dione, maleic acid salt (the "Polymorph") characterized in that it provides: (i) an infra red spectrum contg. peaks at 1752, 1546, 1154, 621, and 602 cm<sup>-1</sup>; and/or (ii) a Raman spectrum contg. peaks at 1751, 1243 and 602 cm<sup>-1</sup>; and/or (iii) a solid-state NMR spectrum contg. peaks at 111.9, 114.8, 119.6, 129.2, 134.0, 138.0, 144.7, 153.2, 157.1, 170.7, 172.0 and 175.0 ppm; and/or (iv) an x-ray powder diffraction (XRPD) pattern which gives calcd. lattice spacings of 6.46, 5.39, 4.83, 4.68, 3.71, 3.63, 3.58, and 3.48 Angstroms; a process for prepg. such a compd., a pharmaceutical compn. contg.

such a compd. and the use of such a compd. in medicine.

SUPPL. TERM: antidiabetic polymorphic thiazolidinedione maleate  
INDEX TERM: Antidiabetic agents  
NMR spectroscopy  
Polymorphism (crystal)  
Raman spectroscopy  
X-ray diffractometry  
(antidiabetic action of polymorphic form of  
[[N-methyl-N-(pyridyl)amino]ethoxy]benzyl]thiazolidinedi  
one maleate)  
INDEX TERM: 168553-12-6  
ROLE: BAC (Biological activity or effector, except adverse);  
BSU (Biological study, unclassified); PRP (Properties); THU  
(Therapeutic use); BIOL (Biological study); USES (Uses)  
(antidiabetic action of polymorphic form of  
[[N-methyl-N-(pyridyl)amino]ethoxy]benzyl]thiazolidinedi  
one maleate)

L1 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2000:772626 CAPLUS  
 DOCUMENT NUMBER: 133:340313  
 TITLE: Therapeutic action and properties of a polymorphic form of 5-[4-[2-(N-methyl-N-(2-pyridyl)amino)ethoxy]benzyl]thiazolidine-2,4-dione, maleic acid salt  
 INVENTOR(S): Blackler, Paul David James; Giles, Robert Gordon; Sasse, Michael John  
 PATENT ASSIGNEE(S): SmithKline Beecham P.L.C., UK  
 SOURCE: PCT Int. Appl., 18 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 INT. PATENT CLASSIF.:  
 MAIN: C07D417-00  
 CLASSIFICATION: 63-8 (Pharmaceuticals)  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000064892	A2	20001102	WO 2000-GB1514	20000419
WO 2000064892	A3	20010125		
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RW:	GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
EP 1173434	A2	20020123	EP 2000-920889	20000419
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BR 2000009934	A	20020604	BR 2000-9934	20000419
JP 2002543075	T2	20021217	JP 2000-614244	20000419
EP 1284268	A1	20030219	EP 2002-80320	20000419
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL			
NO 2001005149	A	20011217	NO 2001-5149	20011022
HR 20010773	A1	20021031	HR 2001-773	20011022
BG 106119	A	20020531	BG 2001-106119	20011120
PRIORITY APPLN. INFO.:			GB 1999-9472	A 19990423
			GB 1999-12197	A 19990525
			EP 2000-920889	A3 20000419
			WO 2000-GB1514	W 20000419

## ABSTRACT:

A polymorphic form of 5-[4-[2-(N-methyl-N-(2-pyridyl)amino)ethoxy]benzyl]thiazolidine-2,4-dione, maleic acid salt (the "Polymorph") characterized in that it: (i) provides an IR spectrum contg. peaks at 1360, 1326, 1241, 714 and 669 cm<sup>-1</sup>; and/or (ii) provides a Raman spectrum contg. peaks at 1581, 768, 670, 271 and 226 cm<sup>-1</sup>; and/or (iii) provides a solid-state NMR spectrum contg. peaks at chem. shifts substantially; and/or (iv) provides an x-ray powder diffraction (XRPD) pattern contg. peaks; a process for prepg. such a compd., a pharmaceutical compn. contg. such a compd. and the use of such a compd. in medicine.

SUPPL. TERM: antidiabetic polymorphic thiazolidinedione maleate  
INDEX TERM: Antidiabetic agents  
IR spectroscopy  
NMR spectroscopy  
Polymorphism (crystal)  
Raman spectroscopy  
X-ray diffractometry  
(antidiabetic action of polymorphic form of  
[[N-methyl-N-(pyridyl)amino]ethoxy]benzyl]thiazolidinedi  
one maleate)  
INDEX TERM: 168553-12-6  
ROLE: BAC (Biological activity or effector, except adverse);  
BSU (Biological study, unclassified); PRP (Properties); THU  
(Therapeutic use); BIOL (Biological study); USES (Uses)  
(antidiabetic action of polymorphic form of  
[[N-methyl-N-(pyridyl)amino]ethoxy]benzyl]thiazolidinedi  
one maleate)

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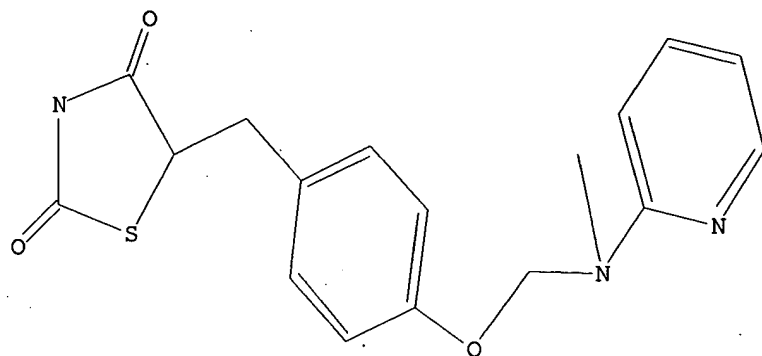
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L1 STRUCTURE UPLOADED

=> d l1

L1 HAS NO ANSWERS

L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> s l1

SAMPLE SEARCH INITIATED 09:09:36 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 1 TO ITERATE

100.0% PROCESSED 1 ITERATIONS

0 ANSWERS

SEARCH TIME: 00.00.02

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS: 1 TO 80

PROJECTED ANSWERS: 0 TO 0

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=> s l1 sss full

FULL SEARCH INITIATED 09:09:46 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 6 TO ITERATE

100.0% PROCESSED 6 ITERATIONS

0 ANSWERS

SEARCH TIME: 00.00.01

L3 0 SEA SSS FUL L1

=> s 5-[4-[2-(N-methyl-N-(2-pyridyl)amino)ethoxy]benzyl]thiazolidine-2,4-dione,  
maleic acid

MISSING OPERATOR '5-[4-[2-(N-METHYL-N'

=> s "5-[4-[2-(N-methyl-N-(2-pyridyl)amino)ethoxy]benzyl]thiazolidine-2,4-dione"

L4 1 "5-[4-[2-(N-METHYL-N-(2-PYRIDYL)AMINO)ETHOXY]BENZYL]THIAZOLIDINE

-2,4-DIONE"

=> file caplus

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

208.03

208.24

FILE 'CAPLUS' ENTERED AT 09:11:20 ON 01 JUL 2003

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FILE COVERS 1907 - 1 Jul 2003 VOL 139 ISS 1

FILE LAST UPDATED: 30 Jun 2003 (20030630/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

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L5 592 L4

=> s l5 and polymorph?

L6 6 L5 AND POLYMORPH?

=> d ibib abs hitstr tot



L6 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2003:434558 CAPLUS

DOCUMENT NUMBER: 139:12310

TITLE: Rosiglitazone edisylates and their use as antidiabetics

INVENTOR(S): Ho, Tia Chien Ting; Millan, Michael John

PATENT ASSIGNEE(S): Smithkline Beecham P.L.C., UK

SOURCE: PCT Int. Appl., 36 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

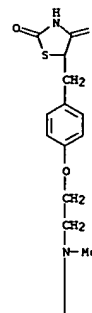
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003045947	A1	20030605	WO 2002-GB5239	20021121
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
PRIORITY APPLN. INFO.: GB 2001-27931 A 20011121				
GB 2001-27932 A 20011121				
GB 2001-27933 A 20011121				
AB A salt of 5-[4-(2-(N-methyl-N-(2-pyridyl)amino)ethoxy)benzyl]thiazolidine-2,4-dione and 1,2-ethanedisulfonic acid, a process for the prepn. of the salt, pharmaceutical compns. comprising the salt and the use of the salt in medicine as antidiabetics are described.				
IT 122320-73-4 CAPLUS				
RL: RCT (Reactant); RACT (Reactant or reagent) (prepn. and properties of rosiglitazone edisylate polymorphs as antidiabetics)				
RN 122320-73-4 CAPLUS				
CN 2,4-Thiazolidinedione, 5-[[4-(2-(methyl-2-pyridinylamino)ethoxy)phenyl]methyl]- (9CI) (CA INDEX NAME)				

L6 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2003 ACS (Continued)

PAGE 1-A



PAGE 2-A



REFERENCE COUNT: 3

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2003:434557 CAPLUS

DOCUMENT NUMBER: 139:12309

TITLE: Preparation of polymorphs of 5-[4-(2-(N-methyl-N-(2-pyridyl)amino)ethoxy)benzyl]thiazolidine-2,4-dione benzenesulfonate for pharmaceuticals

INVENTOR(S): Craig, Andrew Simon; Millan, Michael John

PATENT ASSIGNEE(S): Smithkline Beecham P.L.C., UK

SOURCE: PCT Int. Appl., 47 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

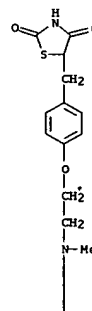
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003045946	A1	20030605	WO 2002-GB5232	20021121
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
PRIORITY APPLN. INFO.: GB 2001-27934 A 20011121				
GB 2001-27935 A 20011121				
GB 2001-27936 A 20011121				
GB 2001-27937 A 20011121				
AB A 5-[4-(2-(N-methyl-N-(2-pyridyl)amino)ethoxy)benzyl]thiazolidine-2,4-dione benzenesulfonate (I) or a solvate, a process for the prepn. of the salt, and pharmaceutical compns. comprising the salt are disclosed. A mixt. of THF and 5-[4-(2-(N-methyl-N-(2-pyridyl)amino)ethoxy)benzyl]thiazolidine-2,4-dione was heated to 50.degree. and treated with benzenesulfonic acid was added to the soln. to give I. I was characterized by spectroscopic and x-ray methods.				
IT 122320-73-4 CAPLUS				
RL: RCT (Reactant); RACT (Reactant or reagent) (prepn. of polymorphs of methyl(pyridyl)aminoethoxybenzylthiazolidinedione salt for pharmaceuticals)				
RN 122320-73-4 CAPLUS				
CN 2,4-Thiazolidinedione, 5-[[4-(2-(methyl-2-pyridinylamino)ethoxy)phenyl]methyl]- (9CI) (CA INDEX NAME)				

L6 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2003 ACS (Continued)

PAGE 1-A



PAGE 2-A



REFERENCE COUNT: 5

THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2002:504785 CAPLUS

DOCUMENT NUMBER: 137:83621

TITLE:

Preparation and use of 5-[4-[2-(N-methyl-N-(2-pyridyl)amino)ethoxy]benzyl]thiazolidine-2,4-dione methanesulfonate

INVENTOR(S): Michael; O'Keefe, Deirdre; Andrew Simon; Ho, Tim Chien Ting; Millan,

Smithkline Beecham P.L.C., UK

PCT Int. Appl., 41 pp.

CODEN: PIXX02

DOCUMENT TYPE: Patent

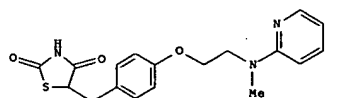
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002051839	A1	20020704	WO 2001-GB5751	20011221
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PRIORITY APPLN. INFO.:				
			GB 2000-31521	A 20001222
			GB 2000-31524	A 20001222
			GB 2000-31526	A 20001222
			GB 2000-31528	A 20001222

GI



AB A compd. 5-[4-[2-(N-methyl-N-(2-pyridyl)amino)ethoxy]benzyl]thiazolidine-2,4-dione (I) methanesulfonate salt (II) or solvate thereof; a process for prepn. I, a compn. comprising I and its therapeutic use is disclosed. Four polymorphic forms were prepd. and characterized. For instance, MeOH (0.54 ml) was added to a mixt. of I (3.0 g) in EtOAc (60 ml) and was heated with agitation to reflux to give a suspension. The resulting mixt. was cooled to 21.degree.C, the solid formed collected by filtration, washed with EtOAc and dried under vacuum for 16 h (3.73 g yield). Polymorphic forms I-IV were characterized by at least one of the following means: aq. soly., m.p., 1H-NMR (soln.), 13C-NMR (solid state), IR/Raman spectra, XRPD and DSC. I is a stable solid with

L6 ANSWER 4 OF 6 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2002:256258 CAPLUS

DOCUMENT NUMBER: 136:299688

TITLE:

Novel polymorphic forms of 5-[4-[2-(N-methyl-N-(2-pyridyl)amino)ethoxy]benzyl]thiazolidine-2,4-dione maleate and process for their preparation

INVENTOR(S): Chebiyyam, Prabhakar; Mamillapalli, Ramabhadra Sarmar;

Krishnamurthi, Vyas; Seella, Vishnuvardhan Reddy;

Gaddam, Om Reddy

Reddy's Research Foundation, India; Cord, Janet I.

PCT Int. Appl., 40 pp.

CODEN: PIXX02

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002026737	A1	20020404	WO 2001-US29896	20010925
V: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NZ, NO, NZ, OH, FI, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, BG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2001091232 A5 20020408 AU 2001-91232 20010925				
PRIORITY APPLN. INFO.:				
			IN 2000-MA805	A 20000926
			WO 2001-US29896	V 20010925

AB This invention relates to novel polymorphic/pseudopolymorphic forms of 5-[4-[2-(N-methyl-N-(2-pyridyl)amino)ethoxy]benzyl]thiazolidine-2,4-dione maleate (I). The invention also relates to a pharmaceutical compn. comprising the novel polymorphic form or their mixt. and a pharmaceutically acceptable carrier. The polymorphic forms of the present invention are more active, as antidiabetic agent, than the hitherto known 5-[4-[2-(N-methyl-N-(2-pyridyl)amino)ethoxy]benzyl]thiazolidine-2,4-dione maleate. I was dissolved in ethanol and was allowed to cool to room temp. over a period of 18 h to yield 80% of >99% pure polymorphic form of I.

IT 122320-73-4

RL: RCT (Reactant); RACT (Reactant or reagent)  
(novel polymorphic forms of triazolidinedione maleate and process for their prepn.)

RN 122320-73-4 CAPLUS

CN 2,4-Thiazolidinedione, 5-[[4-[2-(methyl-2-pyridinylamino)ethoxy]phenyl]methyl]- (9CI) (CA INDEX NAME)

L6 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2003 ACS (Continued)

good water soly., desirable flow properties and is amenable to large scale processing (milling). II is useful for the prevention/treatment of diabetes mellitus.

IT 122320-73-4, 5-[4-[2-(N-Methyl-N-(2-pyridyl)amino)ethoxy]benzyl]thiazolidine-2,4-dione

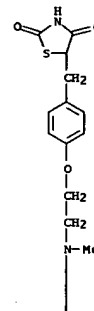
RL: RCT (Reactant); RACT (Reactant or reagent)

(reactant; prepn. and characterization of 5-[4-[2-(N-Me-N-(2-pyridyl)amino)ethoxy]benzyl]thiazolidine-2,4-dione methanesulfonate)

RN 122320-73-4 CAPLUS

CN 2,4-Thiazolidinedione, 5-[[4-[2-(methyl-2-pyridinylamino)ethoxy]phenyl]methyl]- (9CI) (CA INDEX NAME)

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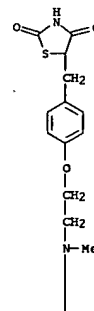


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L6 ANSWER 4 OF 6 CAPLUS COPYRIGHT 2003 ACS (Continued)

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REFERENCE COUNT: 6

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L6 ANSWER 5 OF 6 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2001:724803 CAPLUS

DOCUMENT NUMBER: 136:79548

TITLE: Inhibition of RXR and PPAR.gamma. ameliorates

diet-induced obesity and type 2 diabetes

AUTHOR(S): Yamauchi, Toshinasa; Waki, Hironori; Kamon, Junji; Murakami, Koji; Motojima, Kiyoto; Kameda, Kajuro; Miki, Hiroshi; Kubota, Naoto; Terauchi, Yasuo; Tsuchida, Atsuko; Tsuboyama-Kasaoka, Nobuyo; Yamauchi, Naoko; Ide, Tomohiro; Hori, Vataru; Kato, Shigeaki; Fukayama, Masaaki; Akanuma, Yasuo; Ezaki, Osamu; Itai, Akiko; Nagai, Ryozo; Kimura, Satoshi; Tobe, Kazuyuki; Kagechika, Hiroyuki; Shudo, Koichi; Kadowaki, Takashi

CORPORATE SOURCE: Department of Internal Medicine, Graduate School of Medicine, University of Tokyo, Tokyo, 113-8655, Japan

SOURCE: Journal of Clinical Investigation (2001), 108(7), 1001-1013

CODEN: JCINAO; ISSN: 0021-9738

PUBLISHER: American Society for Clinical Investigation

DOCUMENT TYPE: Journal

LANGUAGE: English

AB PPAR.gamma. is a ligand-activated transcription factor and functions as a heterodimer with a retinoid X receptor (RXR). Supraphysiol. activation of PPAR.gamma. by thiazolidinediones can reduce insulin resistance and hyperglycemia in type 2 diabetes, but these drugs can also cause wt. gain. Quite unexpectedly, a moderate redn. of PPAR.gamma. activity obsd. in heterozygous PPAR.gamma.-deficient mice or the Prol2Ala polymorphism in human PPAR.gamma., has been shown to prevent insulin resistance and obesity induced by a high-fat diet. In this study, we investigated whether functional antagonism toward PPAR.gamma./RXR could be used to treat obesity and type 2 diabetes. We show herein that an RXR antagonist and a PPAR.gamma. antagonist decrease triglyceride (TG) content in white adipose tissue, skeletal muscle, and liver. These inhibitors potentiated leptin's effects and increased fatty acid combustion and energy dissipation, thereby ameliorating HF diet-induced obesity and insulin resistance. Paradoxically, treatment of heterozygous PPAR.gamma.-deficient mice with an RXR antagonist or a PPAR.gamma. antagonist depletes white adipose tissue and markedly decreases leptin levels and energy dissipation, which increases TG content in skeletal muscle and the liver, thereby leading to the re-emergence of insulin resistance. Our data suggested that appropriate functional antagonism of PPAR.gamma./RXR may be a logical approach to protection against obesity and related diseases such as type 2 diabetes.

IT 122320-73-4, Rosiglitazone

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL

(Biological study); USES (Uses)

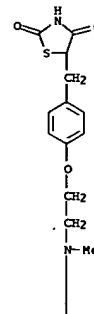
(Inhibition of RXR and PPAR.gamma. ameliorates diet-induced obesity and type 2 diabetes)

RN 122320-73-4 CAPLUS

CN 2,4-Thiazolidinedione, 5-[[[4-[2-(methyl-2-pyridinylamino)ethoxy]phenyl]met hyl]- (SCI) (CA INDEX NAME)

L6 ANSWER 5 OF 6 CAPLUS COPYRIGHT 2003 ACS (Continued)

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REFERENCE COUNT:

55

THERE ARE 55 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 6 OF 6 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1999:437178 CAPLUS

DOCUMENT NUMBER: 131:197757

TITLE: Loss-of-function mutations in PPAR.gamma. associated

with human colon cancer

AUTHOR(S): Sarraf, Pasha; Mueller, Elisabeth; Smith, Wendy M.; Wright, Harold M.; Kum, Jennifer B.; Aaltonen, Lauri A.; De la Chapelle, Albert; Spiegelman, Bruce M.; Eng, Charis

CORPORATE SOURCE: Department of Cancer Biology Dana-Farber Cancer Institute Department of Cell Biology, Harvard Medical School, Boston, MA, 02115, USA

SOURCE: Molecular Cell (1999), 3(6), 799-804

CODEN: MOCEFL; ISSN: 1097-2765

PUBLISHER: Cell Press

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The gamma isoform of the peroxisome proliferator-activated receptor, PPAR.gamma., regulates adipocyte differentiation and has recently been shown to be expressed in neoplasia of the colon and other tissues. The authors have found four somatic PPAR.gamma. mutations among 55 sporadic colon cancers: one nonsense, one frameshift, and two missense mutations. Each greatly impaired the function of the protein. C.472delA results in deletion of the entire ligand binding domain. Q286P and K319X retain a total or partial ligand binding domain but lose the ability to activate transcription through a failure to bind to ligands. R288H showed a normal response to synthetic ligands but greatly decreased transcription and binding when exposed to natural ligands. These data indicate that colon cancer in humans is assocd. with loss-of-function mutations in PPAR.gamma..

IT 122320-73-4, BRL 49653

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

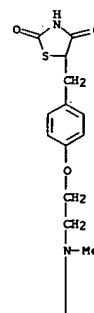
(Loss-of-function mutated PPAR.gamma. assocd. with human colon cancer binding of and transactivation response to)

RN 122320-73-4 CAPLUS

CN 2,4-Thiazolidinedione, 5-[[[4-[2-(methyl-2-pyridinylamino)ethoxy]phenyl]met hyl]- (SCI) (CA INDEX NAME)

L6 ANSWER 6 OF 6 CAPLUS COPYRIGHT 2003 ACS (Continued)

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